



## ENVIRONMENTAL NEWS

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

### enHance Feature Member — DTE PetCoke

In January, MDEQ announced the selection of the first class of members in the new enHance program. enHance is a voluntary state incentive program that encourages environmental stewardship and recognizes environmental leaders. The program showcases the environmental leaders who make a commitment to promote and implement practices that reduce waste, conserve resources, and strive for environmental excellence through continuous improvement. The opening of applications for the next [enHance](#) class began July 1, 2009.



The MDEQ Newsletter will feature one of the new members each month. This month's issue will focus on DTE PetCoke in Vicksburg.



#### 1. Why did DTE PetCoke apply for the enHance program?

DTE PetCoke (DTEPC) is always striving for excellence in our operation—this includes looking for ways to improve our environmental performance. We had recently gone through the OSHA VPP process for safety to show our commitment to setting and exceeding safety standards. With the enHance program we saw an opportunity to be a part of a program that allows us to be recognized for setting and reaching environmental goals. After reading about the enHance program, we realized that the flue gas recirculation project that we had recently completed qualified as an environ-

mental improvement project. We decided to look for other opportunities for environmental improvement projects and developed our environmental management plan.

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## **2. How is enHance membership beneficial for your company?**

enHance gives us an incentive to go “above and beyond” basic environmental compliance and recognizes our efforts at strong environmental performance. Becoming enHance members has also created a lot of pride among the employees.

## **3. What steps has your company taken to be more environmentally friendly?**

DTEPC has developed energy efficiency and waste reduction environmental improvement projects. The flue gas recirculation project

has reduced natural gas consumption at the plant by nearly 50 percent, and our new recycling program has diverted 300 pounds of recyclable material from the landfill in the first six months of the program. This material includes paper, plastic and aluminum cans generated by the eight person team at the site in the course of operations. In addition to these projects, DTEPC’s storm water controls and pollution prevention plan are designed to protect the nearby waterway.

### **Why?**

DTEPC has a strong commitment to environmental compliance and protection. In addition, we can cut operating costs by reducing energy consumption and decrease waste going to the landfill.

## **4. How are you involved in your community?**

DTEPC has high standards for Environmental Stewardship and Best Business Practices. DTEPC began our recycling project at the plant about the same time we applied for the enHance program membership. We are constantly encouraging our business partners and neighbors within the Vicksburg Port to establish improved environmental programs and to exceed standards. We have begun approaching various community organizations to see what opportunities are available for DTEPC to participate in or lead.



*Continued from Page 2*

## 5. Would you recommend enHance to others?

Absolutely. enHance gives companies a framework and an incentive to set and achieve environmental goals. Going “above and beyond” environmental compliance and reaching out to the community creates a lot of good will with MDEQ and the community.

## 6. Tell us about DTE PetCoke. What do you manufacture?

DTE PetCoke is a wholly-owned subsidiary of DTE Energy Company (NYSE: DTE), a Detroit-based diversified energy company involved in the development and management of energy-related businesses and services nationwide.

DTEPC owns and operates a petroleum coke (“petcoke”) pulverizing plant in Vicksburg. Petcoke, a coal-like byproduct of oil refining, is barged from Gulf Coast and Midwest refineries to DTEPC’s Vicksburg plant, where it is pulverized to a fine dust, and delivered to industrial customers via pneumatic truck and railcar. The Vicksburg plant began operations in May 2005, and has a production capacity of 250,000 tons per year.

DTEPC’s customers use pulverized petcoke as an economic alternative fuel to natural gas and fuel oil. DTEPC currently supplies ten paper mills which use pulverized petcoke as a fuel in their lime kilns. Lime kilns are well suited to deal with petcoke’s properties of high sulfur and low volatility. In addition to the paper industry, DTEPC is targeting other industrial users including brick kilns, cement kilns, and lime kilns. DTEPC also produces pulverized coal on a smaller scale for customers looking to test different types of coal or switch to coal from natural gas.



Petcoke is received in barges, unloaded via the conveyor into the building in the foreground. Petcoke is conveyed out of the building to the tall feed silo and then into the pulverizer (center of the photo to the right of the feed silo). The baghouse captures the pulverized petcoke and it is blown into the storage silo in the upper right, of the picture. Pulverized petcoke is loaded out of the storage silo into pneumatic trucks and rail cars for shipment to customers.

## CEQ Elects New Officers

On August 23, the Commission on Environmental Quality elected new officers at its monthly meeting. Jack Winstead of Newton County was elected Chairman and Martha Dalrymple of Amory was chosen as Vice Chairman.

The Commission on Environmental Quality is empowered to formulate policy for the Mississippi Department of Environmental Quality, enforce rules and regulations, receive funding, conduct studies for using the state's resources, and discharge duties, responsibilities and powers as necessary. The seven Commission members are appointed by the Governor to seven-year staggered terms.



Commission on Environmental Quality

Front L-R: Billy Van Devender, Martha Dalrymple, Dick Flowers

Back L-R: Chat Phillips, Charles Dunagin, Jack Winstead, Howard McKissack

### City of Pascagoula Groundbreakings

On August 7, two groundbreakings were held by the City of Pascagoula for four infrastructure projects: Water and Wastewater improvements in the Chipley area (16,800 LF of water mains, 15,100 LF of sewer collection lines, 2,000 LF of force main, and one pump station) and Water and Wastewater improvements in the Beach Boulevard area (1,700 LF of water mains, 2,000 LF of sewer collection lines, 1700 LF of force main, and one pump station).

These projects are part of the Gulf Region Water and Wastewater Plan, formulated to determine water, wastewater, and stormwater infrastructure needs, and is funded through the U.S. Department of Housing and Urban Development’s Community Development Block Grant Program secured by Governor Haley Barbour and Mississippi’s Congressional Delegation.



Pascagoula Mayor Robbie Maxwell speaks at the Beach Boulevard groundbreaking



The ceremonial dirt toss at the Beach Boulevard site



Alice Perry represented MDEQ at the groundbreakings



Breaking ground at the Chipley area location

## MDEQ AWARDS SOLID WASTE GRANTS

The Mississippi Department of Environmental Quality (MDEQ) throughout the year announces solid waste grant funds to local governments to implement various local solid waste projects and programs. The most recent solid waste project awards include the following communities:

**Solid Waste Assistance Grants** were awarded to the following local governments: **Marion County** (\$18,000 for a household hazardous waste collection project) and **Leflore County** (\$25,000 for a local recycling program).

MDEQ makes Solid Waste Assistance Grants, Solid Waste Planning Grants and Waste Tire Program Grants available for local governments annually in the state. The Solid Waste Assistance Grants can be used by local governments for a variety of projects including clean-up of unauthorized dumps; establishment of collection programs for white goods and recyclables; public education programs related to the proper management of solid wastes; employment assistance for local solid waste enforcement officers; and funding assistance for local household hazardous collection programs. Solid Waste Planning Grants are also available for local governments to conduct planning efforts involving the development of a comprehensive local solid waste management plan. In addition, Waste Tire Grants are available through MDEQ for local governments for the establishment of local waste tire collection programs for the proper collection and recycling of waste tires from small quantity generators of waste tires.

For more information on the deadlines for submitting grant applications or on the eligibility of local solid waste projects or programs, contact Luis Murillo or Denise Wilson at MDEQ at 601-961-5171.



Local communities can apply for grants to purchase chipping equipment for creating mulch from vegetative debris and avoiding disposal of such debris in landfills



Local governments can apply for funds to sponsor electronics waste collection and recycling events or programs such as this one in Jackson County

## Mississippi Diesel School Bus Retrofit Program



Installation of a DOC

The Air Division of the Mississippi Department of Environmental Quality has created a program, in association with the American Lung Association of Mississippi, the Mississippi Department of Education, partnering school districts and additional partners, to reduce emissions from diesel school buses. School buses are the safest and most efficient way for children to get to school; however, pollution from all vehicles, especially older diesel vehicles, has health implications for everyone, including children.

The program leverages several funding sources, including the American Recovery and Reinvestment Act, to retrofit school buses with diesel oxidation catalysts (DOC). A DOC is a device that uses a chemical process to break down pollutants in the exhaust stream into

less harmful components. More specifically, it is a physical device with a porous ceramic honeycomb-like structure that is coated with a material that catalyzes a chemical reaction to reduce pollution.

DOCs are able to reduce tailpipe emissions of particulate matter by 40 percent, hydrocarbons by 70 percent, and carbon monoxide by 40 percent. There is no maintenance for the DOCs, and they do not affect the fuel economy of the buses. Due to stricter emissions standards for diesel engines beginning in 2007, the diesel oxidation catalysts will be installed on eligible buses built from 1998 to 2006. Purchase and installation of these devices will be paid for by MDEQ at no cost to school districts.

School buses for the Pontotoc County School District, the Oxford School District, the South Panola School District, and the DeSoto County School District were outfitted in July and August.



Pontotoc County School District bus being retrofitted

The following districts are participating in the program, and their eligible buses will be retrofitted in the near future:

Benoit School District, Booneville School District, Brookhaven School District, Calhoun County School District, Clarksdale Municipal School District, Clinton School District, Coahoma County School District, Coffeerville School District, Covington County School District, DeSoto County Schools, East Tallahatchie School District, Forrest County School District, Franklin County School District, George County School District, Harrison County School District, Holmes County School District, Houston School District, Humphreys County School District, Indianola School District, Itawamba County School District, Jackson County School District, Jackson Public School District, Kemper County Schools, Lafayette County School District, Laurel School District, Lee County School District, Lumberton Public School District, Marshall County School District, New Albany Schools, Oktibbeha County School District, Oxford School District, Pearl River County School District, Pearl School District, Philadelphia School District, Pontotoc County Schools, Quitman County School District, Rankin County School District, Senatobia Municipal School District, Smith County School District, South Delta School District, South Panola School District, Starkville School District, Stone County School District, Tishomingo County School District, Tunica County School District, Union County School District, Western Line Schools, and Winona Public Schools.



Oxford School buses

For more information or to participate in the program, please contact Keith Head in MDEQ's Air Division at 601-961-5577 or [khead@deq.state.ms.us](mailto:khead@deq.state.ms.us).



## INSTITUTIONAL HISTORY CAPTURED IN KODACHROME

David T. Dockery III, Mississippi Office of Geology

I began work with the Mississippi Geological Survey as summer-time help in 1968 as a driller's helper in drilling test holes for the Rankin County geology bulletin. My summer work continued until I finished graduate school and was hired fulltime in the summer of 1978. Photography has always been an important aspect of my job, even when working as a "sunbeam," as the summer help was called. Our publications were illustrated in black and white, and for this purpose the Survey's laboratory was turned into a darkroom for processing film and prints taken of fossils and field exposures. Many field pictures were taken also with 64-ASA Kodachrome and 100-, 200-, or 400-ASA Ektachrome color slide film and with Kodacolor or equivalent color negative film. Now MDEQ's Dallas Baker is requesting pictures that document the department's history. The Office of Geology (MOG) was ready for this occasion with a captioned image file of some 1,300 scanned slides and color negative films (created to use in a book on *The Geology of Mississippi*), some 800 scanned slides from the Geological Survey of Alabama, and 250 scanned slides from the Mississippi Petrified Forest. In the scanning process, color negatives were sometimes found to have a green or blue tint due to age and required much work in Photoshop to be of use, but even Photoshop could not bring back their original brilliance. Certain slide films had also changed in color and needed a little digital doctoring, but the Kodachrome slides were found to be in good condition.



Figure 1. The noonday sun photographed from the driveway of 4550 Manila Drive in Jackson, Mississippi. Picture (Kodachrome slide) taken in September of 1970.

Kodachrome film had a good reputation for its high resolution, lack of "graininess," and as a good archive film before I first used it in 1970. Its fame was even more enhanced by Paul Simons' 1973 song *Kodachrome*. Consider the following verse:

*Kodachrome*

*They give us those nice bright colors*

*They give us the greens of summers*

*Makes you think all the worlds a sunny day, oh yeah*

*I got a Nikon camera*

*I love to take a photograph*

*So mama don't take my Kodachrome away*

Like Paul, by 1970 I was armed with my Nikon camera and Kodachrome film. In searching for my earliest Kodachrome slide for use in the article, I didn't find the greens of summer. The earliest Kodachrome slide I



Figure 2. Astronomy buffs with a video camera projecting image of solar eclipse to a screen shaded inside a cardboard box at Flint Creek Water Park. Picture (Kodachrome slide) taken with a 135 mm lens focused on the screen with the eclipse image on May 30, 1984.

found was a picture of the noonday sun! Why would I have done that?-- Probably because I could. Kodachrome is a daylight film, and my Nikon camera had a shutter speed of 1000<sup>th</sup> of a second and a 55 mm macro lens with an f/stop down to f/32. On May 30, 1984, I once again took a picture of the sun, this time with my Nikon camera and a 135 mm lens and, of course, Kodachrome film. It was a day when geologists with Mississippi Geological Survey joined astronomy buffs at Flint Creek Water Park near Wiggins to see an annular eclipse of the sun (Figures 2-3). Figure 3 is a composite of eight pictures I took with the 135 mm lens (not a telescope) just before, during, and after the moment of total eclipse.

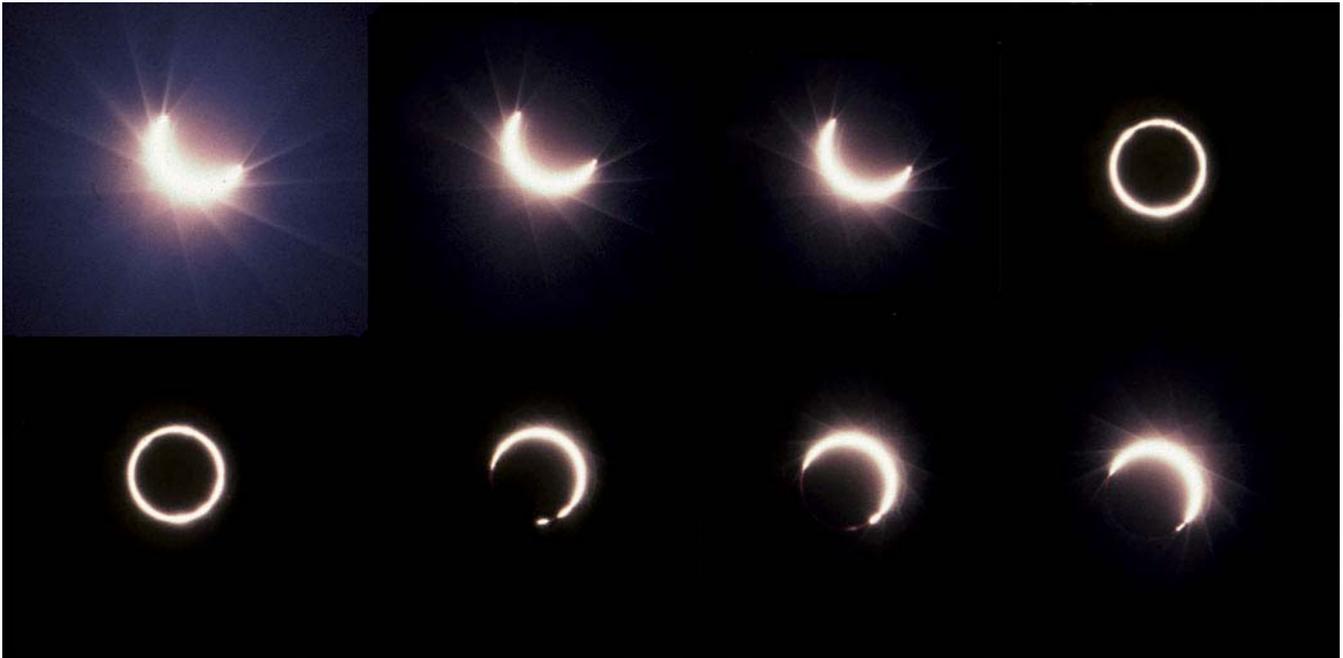


Figure 3. Progression of the 1984 annular eclipse of the sun taken at Flint Creek Water Park with a 135 mm lens. Picture (Kodachrome slide composite) taken on May 30, 1984.

I used Kodachrome film in Figure 4 to capture my experience as a driller's helper in Smith County in the hot summer of 1971. Figures 5-8 record an important field trip to east-central Mississippi led by Wylie Poag, an internationally known expert on the Chickasawhay and Paynes Hammock formations of Mississippi and Alabama, and Jim May, who wrote the Wayne County geology bulletin. More recently in 2002, Wylie Poag distinguished himself in publishing the finding of a meteor crater under Chesapeake Bay in the journal *Geology*. The field-trip pictures show even small details such as fossil shells littering the ground at a site in Newton, Mississippi (Figure 5), and the varied colors of the strata at that same Newton site (Figure 6). In Figure 7, Wylie Poag is showing one of his fossil sites in the Chickasawhay Formation at Waynesboro, Mississippi, while, in Figure 8, Jim May is pointing to his Wayne County Geologic Map to show that he had correctly mapped the geology at the site where they are standing.



Figure 4. Randy Warren (driller at left), Ed Luper (geologist in middle), and Jim May (geologist at right) drilling test holes in Smith County, Mississippi. Picture (Kodachrome slide) taken in August of 1971.



Figure 5. Jim May (left) and Wylie Poag (right) looking at fossil shells in the Cook Mountain Formation near the intersection of I-20 and Highway 15 at Newton, Mississippi. Picture (Kodachrome slide) taken on July 28, 1975.

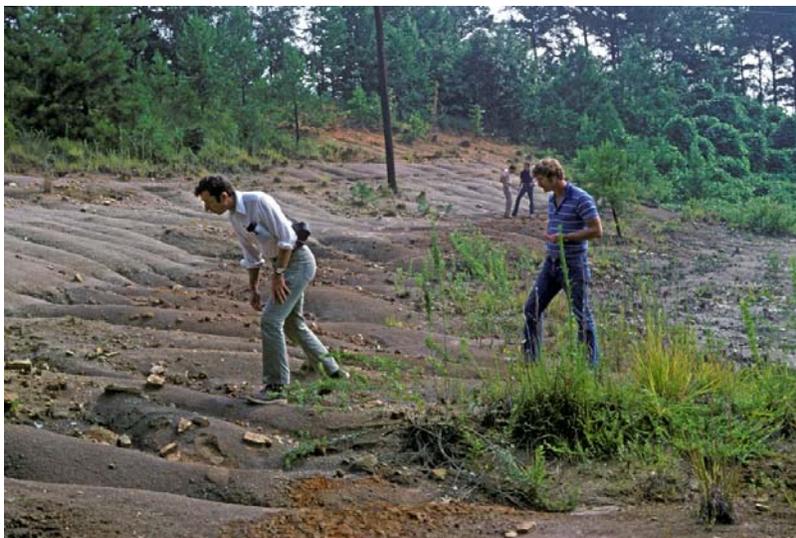


Figure 6. Emmett Adams (left) and Jim May (right) looking for fossil shark teeth in the Cook Mountain Formation near the intersection of I-20 and Highway 15 in Newton, Mississippi. Picture (Kodachrome slide) taken on July 28, 1975.



Figure 7. Jim May (left), Emmett Adams (middle-top), and Wylie Poag (right) collecting a sample of the Chickasawhay Formation on Taylor Creek at Highway 45 in Waynesboro, Mississippi. Picture (Kodachrome slide) taken on July 28, 1975.

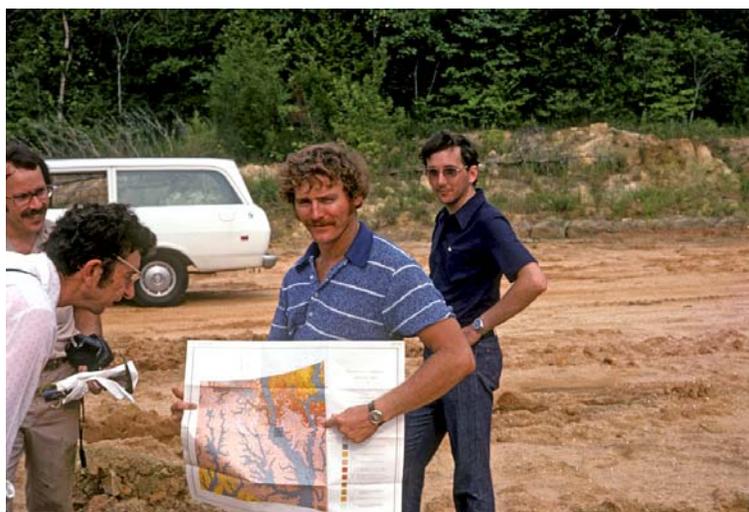


Figure 8. Jim May points to the location they are standing on his geologic map in the Wayne County geology bulletin to show that he correctly mapped the limestone newly exposed in the area. Looking at the map is Emmett Adams (front) and Wylie Poag, with David Williamson at right. Picture (Kodachrome slide) taken on July 28, 1975.

The Eastman Kodak Company announced on June 22, 2009, that it was ending the production of Kodachrome film, citing declining demand. Only one certified Kodak facility remains that processes Kodachrome film in the United States; this facility will continue processing the film until the end of the year. Over its 74-year run from 1935 to 2009, Kodachrome film has been appreciated in the archival and professional market for its color accuracy and dark-storage longevity. This film was used by photographer Steve McCurry when in 1984 he took the well-known portrait of Sharbat Gula, the “Afghan Girl,” which appeared on the cover of the June 1985 issue of the *National Geographic Magazine*. It also appeared on the magazine’s April 2002 cover, where the editor billed it as “the most famous picture in our magazine’s 114-year history.” The girl’s sea-green haunting eyes attracted the world’s attention to the plight of Afghan women and helped create the National Geographic Girl’s Education and Training Center in Kabul, which opened in October of 2002.

A year before Steve McCurry took his famous portrait of the “Afghan Girl,” I took my Nikon camera and Kodachrome film on a fossil-collecting expedition to France, where, using a 135 mm portrait-suitable lens, I also took a picture of a green-eyed subject. It was not a portrait of a French girl, but of a school teacher of Dutch-Bohemian-English descent, my wife Mary, holding her bag of fossils beside a Scottish thistle (the national emblem of Scotland) at the famous Le Guépelle locality (Figure 9). I focused the 135 mm lens on Mary and the thistle, leaving the background a little hazy and giving the picture a three dimensional appearance. Last year an international petition was sent out to save the Le Guépelle site from encroaching development. For 200 years, Le Guépelle had been an important collecting site for fossils of the Late Eocene Bartonian Stage. When a French colleague (Luc Dolin) sent the petition to me, I was ready with a signature and a picture.



Figure 9. Mary Dockery standing beside a Scottish thistle (the national emblem of Scotland) with her fossil collecting bag at a Bartonian Eocene sand pit at Le Guépelle, France. Picture (Kodachrome slide) taken with a 135 mm lens on July 17, 1983.

## **eRulemaking Enhances Regulations.gov for Access to Federal Regulations**

The eRulemaking Program has launched a significant upgrade to the Web site that provides one-stop, public access to information related to current and forthcoming regulations issued by the federal government. Enhancements to regulations.gov include improved search capabilities, new navigation tools, and easier access to areas for the public to provide comments on proposed regulations. The Environmental Protection Agency is the managing partner of the inter-agency eRulemaking Program, which operates regulations.gov.



Visitors to regulations.gov can now streamline search results with date ranges, select specific U.S. government departments or agencies, and view results by docket or file folder. Other changes include interactive icons and links to common user tasks that pre-populate search fields to help users find regulations and comments. The Web site also provides quick access, simplified navigation and additional information sharing, such as social bookmarking and RSS feeds by specific government departments or agencies.

These enhancements were previewed publicly on Regulations.gov Exchange, an online forum featured in the White House Open Government Initiative. From May 21 to July 21, 2009, the public was able to explore proposed new designs and features, provide comments, and engage with other site visitors and the eRulemaking Program staff.

Regulations.gov helps individuals provide written comments to agencies before regulations are finalized. The site supports more than 160 federal agencies accounting for 90 percent of all federal rulemaking production. On average, federal agencies, departments, and commissions issue 8,000 regulations annually. To date, the public can access more than 2 million documents on regulations.gov, and in the first half of 2009, visitors to the Web site submitted more than 200,000 comments on new or existing regulations.

More information on the Web site: <http://www.regulations.gov>.

*(August 3, 2009 EPA Press Release)*

## Greening Up the Capital City



The Great Jackson Chamber Partnership has begun an effort to help make the City of Jackson and the surrounding area more “green” and to find ways that the private sector, concerned individuals, Keep Mississippi Beautiful, Keep Jackson Beautiful, and local and state government agencies can work together. If you are

interested in participating, contact Kellye Smith at 601.948.7575, or [ksmith@greaterjacksonpartnership.com](mailto:ksmith@greaterjacksonpartnership.com).



Clinton City Hall

### **City of Clinton Facility Best in State**

The City of Clinton’s Southside Wastewater Treatment Facility was recently selected as the Outstanding Wastewater Facility for 2008 by the Mississippi Water Environment Association (MWEA). MDEQ employees Rusty Lyons and Larry Murphree are members of the Plant of the Year committee with Lyons serving as the chair.

The award was presented to David Canizaro, Plant Manager and Class IV Certified Operator at the MWEA’s Annual Conference in Bay St. Louis. The annual award recognizes one facility, from hundreds throughout the state, as the best, based on scores in several categories such as permit compliance, maintenance, and record-keeping. Other finalists for the 2008 Award were the City of Pontotoc and the City of Senatobia.

## What's Your EUI?

Miles-per-gallon is a metric everyone understands. It can also be the deciding factor when purchasing a new car. There is a similar metric for buildings that is gaining popularity – EUI. What is EUI? EUI stands for energy use intensity, and it measures the amount of energy consumed per square foot of building space.

EPA has a free software program that calculates EUI for facilities, Energy Star's Portfolio Manager. Requirements include input of electricity usage, gas usage, and building size. The resulting EUI value, expressed as kBtu/square foot, is then calculated and can be used for building performance evaluation. The average EUI can vary greatly depending on the building type. For example, some average EUI's include:



<u>Building Type</u>	<u>KBtu/sq ft</u>
Warehouses	56
Outpatient Healthcare	183
Retail Stores	191
Lodging Facilities	194
Libraries	246
Malls	271
Restaurants/Cafeterias	612

In addition to providing EUI data comparison, Portfolio Manager can also provide benchmark ratings for certain types of facilities. Some types of facilities that can obtain a benchmark rating include office buildings, courthouses, K-12 schools, banks, dormitories, hotels, hospitals, supermarkets, and wastewater treatment plants. The resulting benchmark score of 1-100 indicates exactly where a building stands with regard to energy performance. For example, a score of 33 would indicate that 67 percent of similar buildings in that category are more energy efficient. A score of 50 would indicate average performance. The potential opportunity to implement energy efficient projects can be quickly assessed. Buildings that score 75 or higher are eligible to be awarded the Energy Star label for superior performance.

EPA estimates that if the energy efficiency of commercial and industrial buildings improved by 10 percent, Americans would save about \$20 billion annually. California and the District of Columbia are in the process of requiring labels on buildings that change ownership. The State of Kentucky is requiring schools to enroll in KEEPS, an Energy Management and Training System based on Energy Star. ASHRAE, the American Society of Heating, Refrigerating and Air conditioning Engineers is in the process of launching a new program similar to Portfolio Manager, called Building Energy Quotient, which will rate buildings on a scale from A+ to F.

What is your EUI? How do you rate? Do you have the opportunity to achieve significant energy savings? Find out by logging on to [www.energystar.gov](http://www.energystar.gov) to get the answer. If you would like free assistance in obtaining your facility EUI, contact the MDEQ Pollution Prevention Program at 601-961-5284.

## THE PETRIFIED LOG AT DANFORTH CHAPEL, UNIVERSITY OF SOUTHERN MISSISSIPPI

David T. Dockery III, Office of Geology

The first time I saw the 65-foot-long petrified log beside Danforth Chapel on the campus of the University of Southern Mississippi, I was impressed that a petrified log of such length had been found and wondered where it came from. Then I tried to imagine how it was possible to transport it to campus in one piece. Over the last twenty years or so the log has become such a part of campus that students and faculty walk by hardly noticing it. They sit on it, meet beside it, and mill around it without thinking, "Hey, there's a sixty-five-foot-long petrified log on campus!" Although there is a bronze plaque dated October 3, 1987, commemorating "The Chapel Place" adjacent to the front of the chapel (not seen in figures 5-6), there is nothing explaining the history of the log. With no commemorative plaque, perhaps one might think it's always been there--after all, the log is petrified; it could have occupied its spot before the campus was built. Perhaps the vortex of busy sidewalk thoroughfares was built around the log. With continued faculty turnover, the institutional knowledge about this log is vanishing. Some of the log's history might have been lost had it not been for the photographic record and recollections of retired biology professor Dr. Sam Rosso. Dr. Rosso allowed the Mississippi Office of Geology to scan his slides of the log's excavation and preparation for transport to the USM campus.



Figure 1. Building a cradle of drill stems and straps under a 65-foot-long petrified log in a sand and gravel pit near Ovetv in Jones County, Mississippi. Picture (slide) taken by Sam Rosso in September of 1987.



Figure 2. Crane lifts a 65-foot-long petrified log from a sand and gravel pit near Ovetv in Jones County. Picture (slide) taken by Sam Rosso in September of 1987.

One interesting aspect of the USM petrified log is the commitment of faculty and private individuals who acquired the log and moved the log to the campus. The log was found during mining operations in a terrace deposit near the town of Overt in Jones



County in 1987, where it was sighted by Richard Moore of the Science Education Department. Moore took USM professors Sam Rosso, Bobby Irby, David Patrick, and graduate student Clifton Eakes to see the log. Bobby Irby convinced University President Dr. Aubrey K. Lucas to buy the log, after which Irby and Sam Rosso convinced the landowner Mr. Johnson to sell the log to USM rather than to make a roadside display of it. A faculty committee was established to acquire and move the petrified log. Dr. Lucas obtained the funds from private contributions to make the move happen.

Figure 3. Crane lowering 65-foot-long petrified log on to a flatbed trailer for transport to the University of Southern Mississippi. Picture (slide) taken by Sam Rosso in September of 1987.



Figure 4. 65-foot-long petrified log from a sand and gravel pit near Overt in a drill stem and metal strap cradle, resting on a flatbed trailer for transport to the University of Southern Mississippi. Picture (slide) taken by Sam Rosso in September of 1987.



Figure 5. Petrified walnut-like hardwood beside Danforth Chapel on the campus of the University of Southern Mississippi. The log was donated in September of 1987 and came from a sand and gravel pit in a terrace deposit near Overt in Jones County. Picture (digital CD #21) taken on May 10, 2007.

The USM petrified log was moved to the campus in September of 1987 in the following phases. A trench was dug around the log by faculty and students (a party that included Sam Rosso, his daughter Kim, and Clifton Eakes) so that welders could construct a cradle of drill stem and metal straps beneath the log to support its weight for transport (Figure 1). Next a crane was hired to lift the log from its resting place to the bed of a flatbed trailer (figures 2-4). Once on campus, the log was lifted from the trailer and placed in its present resting place next to Danforth Chapel (figures 5-6). Biological examinations of the fossil wood indicated the log was that of a walnut-like hardwood.



Figure 6. View along the length of the petrified log beside Danforth Chapel on the campus of the University of Southern Mississippi. Picture (digital CD #49) taken on May 10, 2007.

## First Secchi Day in Mississippi Scheduled August 22 near Iuka

Teams in boats and canoes will launch from Aqua Yacht Marina on Highway 25 August 22, 2009, to participate in the state's first Secchi Day slated for Yellow Creek at Pickwick Lake. Secchi Days are held throughout the country to monitor water transparency on lakes and other types of waterbodies using an instrument called a Secchi Disk, a flat black and white disk lowered from a rope into the water until it disappears.

The Secchi Disk is named for its designer Pietro Angelo Secchi who first used the disk more than 150 years ago. The depth the disk disappears is a measure of the transparency of water which can be impacted by the color of water, particles of silt and clay or small plants called algae. Thousands of volunteers participating in Secchi Days provide a snapshot of water quality for almost 10,000 lakes in the U.S.



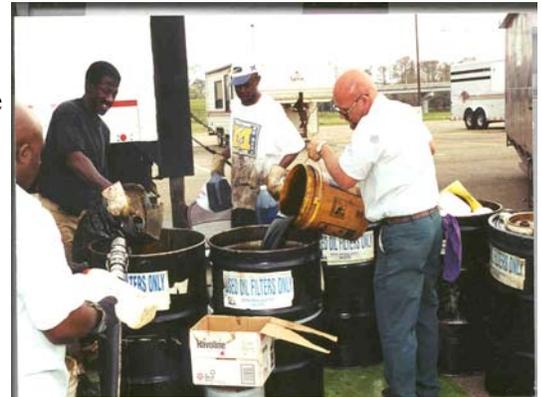
Trying out a Secchi Disk in front of Aqua Yacht Marina

Teams participating in Secchi Day on Yellow Creek and Pickwick Lake will use Secchi Disks to take measurements at 30 pre-selected sites, return to Aqua Yacht Marina to report measurements, and join spectators for free lunch and water quality education displays from national and state conservation organizations including Tennessee Valley Authority, Mississippi Department of Environmental Quality, Tishomingo Soil & Water Conservation District and others. Family and friends are encouraged to attend, cheer their team on, and visit the educational programs and displays.

Year-round and seasonal residents of the area, as well as organizations and others interested in water sampling are invited to register teams as soon as possible. Teams are encouraged to recruit safe numbers of team members for their water craft. Children under 18 must be accompanied by a parent or adult 21-years-old or older. To request your registration form or to learn more about Secchi Day at Yellow Creek and Pickwick Lake, contact Delta Datsis at 662-423-6272 or [tishomingoswcd@bellsouth.net](mailto:tishomingoswcd@bellsouth.net).

**MDEQ PARTNERS WITH LOCAL GOVERNMENTS TO SPONSOR HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENTS IN 2009**

MDEQ is joining with several local governments throughout the state to sponsor collection events for household hazardous wastes (HHW). Solid Waste Assistance Grants have been awarded by MDEQ to these communities to assist in funding the local HHW collection events. These collection events provide citizens with local options to properly and safely dispose of aerosols, corrosives, pesticides, herbicides, paints, used oil, batteries, automotive fluids, electronic wastes and other household hazardous materials. The events help to remove these hazardous materials from the municipal solid waste stream so that the wastes are not disposed in local landfills. The local governments that have been awarded grants for these events and the expected dates of the events are listed below:



**HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENTS FOR 2009**

Grant Recipient	Proposed event date
DeSoto County	October 3 (Oct. 9, Alternate)
Harrison County	October
Jackson County	October
City of Water Valley	To Be Announced
City of Grenada	September 9
Marion County	October
Rankin County	November
City of McComb	October 3

These dates represent the best available information at the time of publication. Check with your local officials for more details.



Other counties, municipalities and solid waste authorities may apply by submitting a grant application by October 1 or April 1 of each funding year through MDEQ’s Solid Waste Assistance Grants Program. For more information on solid waste assistance grants or on a particular event in your area, contact Luis Murillo or Denise Wilson at 601-961-5171.

## MDEQ ENVIRONMENTAL ACTIONS

For a listing of draft permits currently at public notice, click [here](#).

For a listing of permits and certificates issued in the last 90 days, click [here](#).

For a listing of the general permit coverages issued in the last 90 days, click [here](#).

For a list of the permit applications received by the Environmental Permits Division, click [here](#).

For a list of the Notices of Intent for coverage under a Statewide General permit received by the Environmental Permits Division, click [here](#).

For a list of the 401 Water Quality Certifications currently at public notice, click [here](#).

For a list of the compliance inspections recently conducted, click [here](#).

*\*Thanks to Michelle Vinson for compiling these.*

## Picture of the Month

Off Leverette Lane looking North-Northeast toward Highway 35, south of Paynes in Tallahatchie County. Taken in February 2009, by MDEQ's Randy Wolfe.



*The mission of the Mississippi Department of Environmental Quality is to safeguard the health, safety, and welfare of present and future generations of Mississippians by conserving and improving our environment and fostering wise economic growth through focused research and responsible regulation.*

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MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL  
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